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EXTENSION SERVICE

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TOMORROW . . .

"A CALL TO SERVICE," an editorial by Dr. C. B. Smith, Assistant Director of the Extension Service, will discuss the place of extension work in the present scheme of things.

WIND EROSION comes with the spring but the States concerned will not be unprepared. A survey of the work which has been done and plans for the future will be reviewed next month.

ANNIVERSARIES are the rule of this year in the Extension Service. New Jersey, one of the first States in the East to establish county agent work, celebrates and unearths some interesting facts about early activities.

LOAN FUNDS to help the rural young people of South Carolina obtain an education are proving a worth-while investment, according to Jane Ketchan of the State Extension staff, who will review the history of these funds set up by home demonstration and 4-H groups.

RADIO PROGRAMS that "click" often seem an illusive phantom to many agents who take radio seriously. C. W. Ferguson, Colorado State club leader, has developed a few such programs and will tell how he does it.

A SINGING COUNTY in Mississippi will explain how music can spring from county planning.

METHODS for making agricultural policy effective, both those which have been used and those suggested, are put under the microscope by H. R. Tolley, AAA Administrator.

On the Calendar

Southwest Texas Boys' Fat Stock Show, San Antonio, Tex., Feb. 24-26.

Houston Fat Stock Show, Houston, Tex., Feb. 26-Mar. 6.

62d Annual Convention Texas and Southwestern Cattle Raisers Association, Inc., San Antonio, Tex., Mar. 8-10.

Eastern States Regional Conference, New York, N. Y., Mar. 3-5.

Southwestern Exposition and Fat Stock Show, Fort Worth, Tex., Mar. 11-20.

American Home Economics Association Meeting, Pittsburgh, Pa., June 28-July 1.

Triennial Meeting of the Associated Countrywomen of the World, London, England, week of June 5, 1939.

What Can Home Economics Contribute To an Agricultural Program?

MRS. KATHRYN VAN AKEN BURNS

President

American Home Economics Association

Home Demonstration Leader, Illinois

THE agricultural program has been rather generally concerned with production. Generally speaking, home economics has been concerned with consumption. Therefore, it would seem that the two programs might complement and supplement each other.

HOME economics knows something about what people do and will consume, as well as knowing something about what they *should* consume. Many times home economics has been asked to help use up surplus agricultural commodities, which is all right in an emergency. However, we need to recognize that there is a limit to the amount the public can be urged to consume, in spite of meat weeks, cheese weeks, and cotton or woolen weeks. The newer knowledge of nutrition is affecting habits of food consumption.

PERHAPS home economics can help agriculture to interpret consumption patterns and, in turn, to interpret to the consumer where the best consumption values lie. Gathering and interpreting by the Bureau of Home Economics of the data relating to food consumption at different economic levels are outstanding examples of the contribution that home economics can make to a program of agricultural production. These data show that if satisfactory diets were maintained, we should need a substantial increase in the production of milk, eggs, fruits, and vege-

tables, as well as some increase of other food-stuffs. Of course, we know that many of these homes cannot afford such diets without a redistribution of the national income. However, it is interesting to note that many homes in which the diets are not adequate are spending enough money on food to buy a satisfactory diet. This would seem to indicate that the educational program of home economics may pay dividends to agriculture. As the Bureau found that less than half the rural homes have satisfactory diets, there is some opportunity to direct production toward desirable consumption standards in these areas without getting involved in the redistribution of the national income.

HOME economics has been working at its educational program for a good many years. It still lacks emphasis, not only with the consuming public, but in the colleges that devote more personnel and funds to animal feeding than to the problems of human feeding.

AGRICULTURE is interested in setting up standards for food and fiber products that will meet consumer demand. Home economics is in a position to interpret these standards to the consuming public, so that it may be better informed about buying guides for both foods and fibers and have a better understanding to buy more intelligently the products of agriculture. That the consumer is becoming more interested in standards upon which to buy is evident on every hand.

TO SOME extent home economics can help agriculture to devise new uses for agricultural products. The research on the use of

(Continued on page 21)



Georgia Mountain Farmers Develop a New Crop

THIS year certified Irish potatoes were successfully grown in the mountain counties of north Georgia. This type of work is in itself not new in the country but is a new undertaking for the north Georgia farmers.

The possibilities of growing certified Irish potato seed in north Georgia have been considered and investigated for several years. Because of soils, high altitude, and plentiful supply of moisture, it was felt that seed potatoes could be grown here successfully.

During the fall of 1936, representatives of the Extension Service, interested railroads, prospective buyers, and users of seed met and discussed this project. At this meeting it was decided that there were good possibilities both in producing and in selling certified seed potatoes from this section.

The next step was to call a meeting of the county agents, Tennessee Valley Authority agents, and Rural Resettlement farm supervisors of the interested counties. A plan of procedure was mapped out and approved at this meeting. It was decided that the project would be

confined to counties having an altitude of 1,800 feet or more. The counties included were: White, Habersham, Rabun, Towns, Union, Fannin, and Gilmer Counties. Because of the newness of the project it was decided that this would not be made a general program in the counties, but that the county agents would select a small number of their better potato growers as demonstrators to initiate the project.

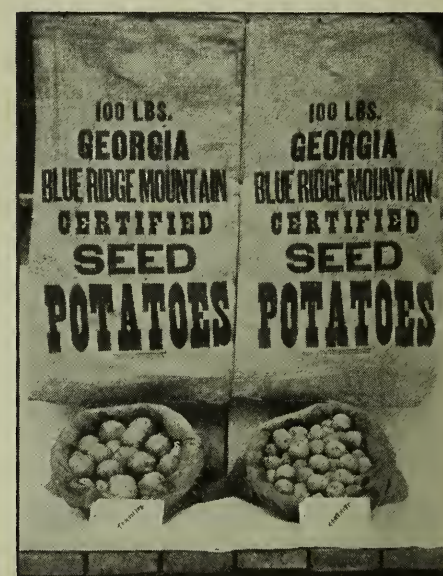
After the agents had contacted their farmers and determined the quantity of seed they would need, two carloads of the best certified medium-strain Bliss Triumph seed were obtained. Upon arrival, this seed was inspected and then treated by the county agents before being given out to the growers. A total of 62 acres in the seven counties was planted.

The yields obtained by the growers in this project were very gratifying. They averaged more than 200 bushels to the acre in most of the counties. This yield was higher than the average yield obtained by other farmers in the same counties growing potatoes from certified seed

of other varieties. The yield was about three times the average yield of all potato varieties grown in the same counties.

The price received by the growers was satisfactory, and most of them are planning to increase their plantings. New growers will also be enrolled in 1938.

This project is noteworthy chiefly in the number of agencies and specialists cooperating to make it a success. In the first place, Georgia had no certification regulations for producing certified seed potatoes. The authority lies with the State Department of Entomology. The State entomologist was ready and willing to give any assistance his department could furnish. A meeting was arranged and attended by M. S. Yeomans, State entomologist; Dr. J. H. Miller, head, plant pathology department, University of Georgia; and H. W. Rankin, extension plant pathologist. At this meeting, rules and regulations for the certification of seed potatoes were drawn up and approved. Since the department of entomology had no potato inspector at that time, the extension plant pathologist was given authority to inspect these potatoes. During the last field and bin inspection he was assisted by Mr. Gunn from the State Department of Entomology. The State Department of Entomology also printed and distributed certification tags at shipping time.



The agricultural department of the Seaboard Air Line Railroad gave a great deal of assistance in carrying out the project.

The extension horticulturist, Elmo Ragsdale, worked with the growers throughout the season, giving them advice on planting, fertilization, and cultivation

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H. C. ALBIN
Procurement Officer
Federal Surplus Commodities
Corporation



Inspector of the Federal-State Inspection Service working on a shipment of West Virginia apples bought as part of a surplus removal program conducted in 26 States.

WHEN the Federal Surplus Commodities Corporation has a job to do, there is no better co-worker in its execution than the Extension Service. This applies particularly to the county agents, who are directly affected by F. S. C. C. activities.

Many extension workers are familiar with the F. S. C. C. However, there are many not so well acquainted with its activities.

The Federal Surplus Commodities Corporation is the successor to the Federal Surplus Relief Corporation. The latter was organized in 1933 as a non-profit organization and incorporated under the laws of Delaware as an instrumentality by which those in the Nation's bread lines might be served.

The Administrator of the F. E. R. A., the Secretary of Agriculture, and the Governor of the Farm Credit Administration served as the first members of the newly created F. S. R. C.

By the fall of 1935 the F. S. R. C. had become so successful as a medium by which oversupplied markets were relieved, and its work so effective in benefiting those markets, that it was decided to utilize its facilities primarily for that purpose. Its name was changed to the F. S. C. C. and the membership designated as the Secretary of Agriculture, Governor of the Farm Credit Administration, and the Administrator of the Agricultural Adjustment Administration. Although distribution of surpluses for relief purposes was still extremely important, especially from a standpoint of quick disposal of the excess supplies, relief needs were made secondary to the objective of assisting producers through the administering of first aid to "sick" markets by removal of some of the price-depressing oversupply. More recently, Congress recognized F. S. C. C.'s value as such an agency by legally designating it as a division of the Federal Government, under the direction of the Secretary of Agriculture.

Federal Agency Buys Surplus to

Stabilize Farm Markets

Thus, today we find the F. S. C. C. active in behalf of the agricultural producer, and during the fiscal year 1936-37 millions of pounds of surplus farm products were taken from congested markets, entailing the expenditure of approximately \$15,000,000 in the cost and transportation of the commodities. Products so handled included dry beans, butter, cauliflower, fresh eggs, grapefruit, grapefruit juice, evaporated milk, onions, dried peaches, Bartlett pears, dry peas, Irish potatoes, dried prunes, sirup, dry skim milk, fresh and dried apples, fresh green beans, beets, cabbage, carrots, celery, cheese, fresh corn, dried figs, honey, Bosc pears, Clairgeau pears, sand pears, fresh peas, tomatoes, turnips, Swiss chard, English walnuts and rice and wheat, purchases being made in 34 States and the District of Columbia. The commodities handled were distributed for consumption throughout the Nation.

Space in the EXTENSION SERVICE REVIEW will not permit a detailed account of the whys and hows of F. S. C. C. operations, but here are the more important ones:

F. S. C. C. does not purchase unless there is a general surplus affecting a relatively large number of producers and unless the commodity can be handled effectively. Isolated purchases are not

made, because they would contribute nothing to a market's stability.

Purchases are not made primarily to meet food needs of relief recipients but to strengthen markets and to bolster grower prices.

The quantity to be handled, and the total expenditure, must depend upon the surplus, and upon the condition of the market.

The prices paid by F. S. C. C. must necessarily depend upon the surplus situation and upon the conditions peculiar to the market for the commodity involved. F. S. C. C. is not concerned primarily with what a few growers may gain directly from its operations as individuals, but rather with the benefits which may accrue to the industry or group as a whole from a more stable and remunerative market. The benefit from better sales of that part not purchased by F. S. C. C. is considered as the major value of the programs.

When F. S. C. C. purchases in one area, it is with the expectation that its activities will be helpful to producers of the same commodity in other areas, as in most instances the general effect on the market is the same, regardless of the area of operations.

Surpluses handled by F. S. C. C. are distributed by State agencies to persons
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Introducing a New Sirup-Making Process

EXTENSION'S traditional job of extending the results of scientific research has again demonstrated its value in Alabama in the introduction of a new method of making sorghum and sugarcane sirups which is proving successful, profitable, and popular.

It is proving popular and successful because of the improved quality, taste, and color of the sirups and profitable because of a ready market. After 2

about 6,000 gallons of sorghum and 9,000 gallons of sugarcane sirup during the fall of 1937.

An illustration of the popularity of the sirup is found in the following words of Luther Fuller, general farm products agent, Tennessee Coal, Iron, and Railroad Co., Birmingham:

"There is a good demand in Birmingham for the sirup produced under the new process. This sirup is uniformly

Visits with the six Alabama farmers using the process in 1937 reveal that they are well pleased with results obtained.

The possibilities of the new process are emphasized by the fact that about 35 million gallons of sugarcane and sorghum sirups are produced yearly on farms of Alabama, Georgia, Florida, Mississippi, Louisiana, North and South Carolina, Arkansas, Texas, and other Southern States. The sirups are used as a cash income and for family subsistence.

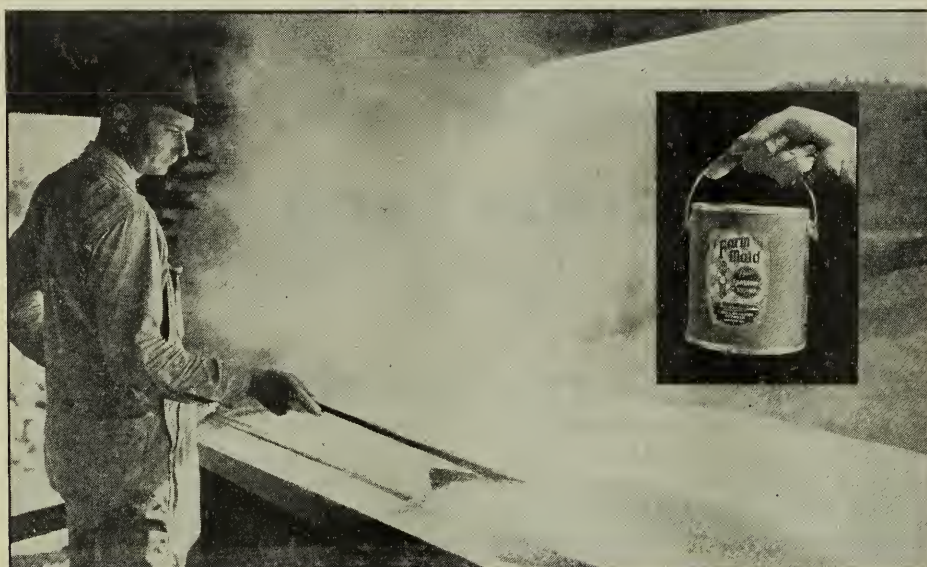
Stabilize Farm Markets

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on relief and do not enter into competition with regular commercial marketings.

When purchases are made, grade and other requirements are the result of careful study and are found to be best suited to the results to be obtained.

Finally, care is taken so that consumer interests will not be jeopardized by F. S. C. C. operations. These activities, conducive to more normal market action, also tend to level off the peaks of oversupply so that an attendant valley of undersupply may not be encouraged in a subsequent crop year.



An Alabama farmer demonstrates the new method of making sirup and marketing it under a special brand. (Illustrated in insert.)

years' experience with the new process, agricultural leaders and farmers are freely predicting that it will revolutionize both sorghum and sugarcane manufacturing on farms throughout the South within the next few years.

The method was developed by the Bureau of Chemistry and Soils of the United States Department of Agriculture, Washington, D. C., and made public in 1936. Immediately, officials of the Alabama Extension Service became interested, and M. D. Harman was employed as extension sirup specialist to work with a few Alabama farmers in trying out the new method on their farms. Three farmers cooperated with Mr. Harman in producing 1,534 gallons of sorghum sirup and 1,475 gallons of sugarcane sirup in 1936. There was such a demand for the sirup that six farmers readily cooperated in producing

made, of good quality, packed in attractively labeled cans, and the supply available is considerably less than the demand right here in Birmingham."

"We are delighted with the results obtained from the new process," adds P. O. Davis, director, Alabama Extension Service.

"Judging from the success already attained, it is reasonable to assume that much of the sorgho and sugarcane sirups produced in the United States will soon be made by the new process," writes Henry G. Knight, chief, United States Bureau of Chemistry and Soils.

"The new process offers a number of advantages over the method used for generations in the South. Sorghum made the new way is milder in flavor, has a more uniform lighter color, contains fewer dregs, does not crystallize or 'go to sugar' like sirup made the old way, and keeps better," says Dr. Knight.

Hybrid Corn Recommended

A few years ago the Ohio Extension Service began advocating the use of hybrid corn in the State. Farmers had to be convinced that hybrid corn was profitable; good seed sources had to be established, and farmers had to be taught that all corn called hybrid was not adapted for use on their farms.

According to R. D. Lewis, Ohio agronomy specialist, less than 2 percent of the corn acreage in Ohio was planted to hybrid corn in 1936, as compared with 8 percent in the following year, when many farmers who wanted the seed could not obtain it. Mr. Lewis continued: "In 1937 enough adapted hybrid seed was produced in Ohio to plant from 25 to 30 percent of the total corn acreage in the State this year, and it is probable that all available seed will be used in 1938. This will mean a change in practices on 875,000 acres in 2 years. This change has been accomplished in spite of the fact that each grower must buy seed each year when his inclination is to follow old practices of selecting seed corn from the field and to avoid the expenditure of money."

Who Joins 4-H Clubs?

4-H CLUB WORK is reaching the sons and daughters of tenant farmers as well as the sons and daughters of owners. In fact, all intellectual, social, and economic levels are represented in the 4-H membership, according to data on the records of 14,000 boys and girls living in 83 counties of 21 different States analyzed by Barnard Joy, agriculturist, extension studies and teaching section of the Federal Extension Service. There seems to be a tendency for some groups of young people to join in larger numbers than others. This is due in part to family factors such as the economic standing, education, and community activities of parents. These family factors appear to have a greater influence on the club affiliations of boys and girls than the mental capacity of the children themselves.

Intelligence tests given by Dr. M. E. Duthie and the Illinois Extension Service show that 4-H members are essentially a representative cross section of rural boys and girls and not an unusual group with intellects superior to the nonmembers of 4-H clubs.

Children of well-educated parents are more likely to join 4-H clubs than the children of poorly educated parents, according to data gathered on 7,232 young people in 12 States. Out of every 10 boys whose parents have only common-school education, 4-H clubs reach 3; out of every 10 boys whose parents have had some high school or more advanced education, 4-H work reaches 5. The data for girls show that the club work reaches three out of every six girls whose parents have had only common-school education and four out of six girls whose parents have had education beyond the elementary school.

That children of parents who are active in community organizations are more likely to join 4-H clubs than boys and girls from families with fewer club affiliations is borne out by the 4-H studies made by Illinois and Dr. Duthie. Additional data from the studies conducted by the Federal Extension Service in cooperation with 15 different States and including 10,263 boys and girls show that 62 percent more of the boys and girls of club age whose parents were members of one or more farm or home

organizations were in club work than the children of parents who had never affiliated with such organizations.

The fact that 4-H club work does reach some of the children whose parents have not had the advantage of high-school education or whose parents are not active in community organizations indicates interest in 4-H work. More effort to inform these groups of parents in regard to 4-H club work and its objectives should result in more effective work with their children.

The question is often asked, "Do owners' children or tenants' children join 4-H clubs?" Studies made in 4 Southern States including 3,977 farm young people indicated that the 4-H clubs were reaching approximately 35 percent of the sons and 45 percent of the daughters of tenant farmers as compared with 52 percent of the sons and 56 percent of the daughters of farmers who are owners.

According to 4,116 records from 6 middle Western States, 4-H club work in this section has been reaching 1 out of 4 boys who are the sons of farm tenants and 1 out of 3 boys who are sons of farm owners. 4-H work has been reaching almost half of the tenants' daughters and approximately the same proportion of the owners' daughters.

In six Eastern and three Western States, where the percentage of tenant farmers is low as compared with other sections, a slightly higher percentage of both the sons and daughters of farm tenants joined the 4-H clubs than did the sons and daughters of owners. This conclusion is based on 3,187 records.

Additional data based on such measures of economic standing as the Sims scale, the size of the farm, and whether or not the family had a telephone supported the conclusion that in some States children whose families enjoy a better economic status are more likely to join the 4-H clubs than other children and that the economic standing of the family is more likely to affect the son than the daughter in regard to joining a 4-H club. The higher cost of agricultural as compared with homemaking projects is a partial explanation of this varying influence of the economic factor upon boys' and girls' enrollment.

The results of the 4-H club study made by Illinois are considered typical of the results of other studies in the Central States and appear to indicate that sons of farm owners join in larger numbers than sons of tenants, but as large a proportion of the daughters of tenants join 4-H clubs as the daughters of owners. These and other data indicating that the better the economic standing of the family the more likely that the son would join a 4-H club caused the State leaders of boys' work in Illinois to make some changes in their program in order to reach a larger number of the boys in families of lower economic standing.

The agents were urged to put more emphasis on the low-cost agricultural projects such as gardening, poultry, and home beautification. The poultry project was changed so that the 4-H member could work under a partnership arrangement with his family instead of being required to own a flock of chickens. The requirement for the sheep project was reduced from the ownership and care of three purebred or five grade ewes to the ownership and care of one ewe and her offspring.

What Can Home Economics Contribute to an Agricultural Program?

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soybeans as food in my own institution is an illustration of this point. The Bureau of Home Economics has developed new uses for cotton fibers. Many other illustrations might be given, but the point seems self-evident.

Today, we seem to be hearing on every hand about planned agricultural economies for certain areas, about soil erosion and soil conservation. In many areas agriculture is planning new farm programs. Its data are based on years of research on soils and crop production, and no one can dispute the scientific way in which agriculture has gone about determining how much income a certain size and kind of farm can produce. Its data on how well the land can support a farm family are somewhat more open to question.

Plans made for family living should be as sound as those made for soil building. Agriculture knows how much real income the land will produce; home economics knows the level of living that this income will furnish the family. Again, the two programs can complement and supplement each other. It is just as important to make sound, long-time plans for family-living planning as it is to make long-time plans for soil building.

Arkansas Outflanks Apple Surplus

Intensive Marketing Campaign Protects Growers Against Impending Loss



THAT a State can oftentimes solve its own problem of surplus is demonstrated in the movement of 1,750,000 bushels of apples as the result of an intensive marketing campaign under the leadership of the University of Arkansas College of Agriculture this fall.

Before the launching of the apple-marketing campaign Arkansas growers were faced with a 450,000-bushel surplus, with prices ranging from 35 to 40 cents per bushel on the few bushels being moved.

A special committee of extension workers was appointed to draft a marketing campaign in which every extension worker in the State was later to play a part. Preliminary work consisted of the compilation of names and addresses of all commercial growers, the supply of apples on hand, and the varieties. This information was placed in the hands of all the county and home demonstration agents in the State, jobbers, chain stores, and State agencies such as the State hospital and other eleemosynary institutions. Apple recipes, leaflets, and window stickers were supplied to the trade preparatory to the campaign's "kick-off."

The campaign was opened with "Arkansas Apple Week," October 11 to 16, by proclamation of Governor Bailey. During that week stores, restaurants, and hotels featured Arkansas apples in

To move the big apple crop all Arkansas cooperated. Stores and restaurants featured apples; every air passenger going through Little Rock received an apple wrapped in cellophane from the hostess; and home-economics classes in high school were given lessons in canning apples by home demonstration club women.

window displays; and desserts throughout the week consisted of apple pastries. One Little Rock newspaper conducted an apple-recipe contest with cash awards to the first three place winners. Radio stations cooperated throughout the week by "plugging" Arkansas apples several times a day.

Schools during the week studied the history of apples and Arkansas varieties. Some schools required the children to bring three apples a day. In fact, it was one time in the year when "Johnny" got an approving pat on the head for eating apples in school.

Women's clubs in the State talked, prepared apple dishes, and ate apples. One chain-store organization bought the entire apple exhibit of the Benton County fair and placed it on display in a large hotel at Little Rock. It also sent the grand champion bushel of apples to "Lum and Abner" in Hollywood by air line. This chain also cooperated with an air-line company in presenting champion, cellophane-wrapped apples to passengers passing through Little Rock during Arkansas Apple Week. Even Professor Quiz, of radio fame, received a champion basket. In fact, Arkansas became so apple conscious that the fruit appeared on breakfast, dinner, and supper tables of the State.

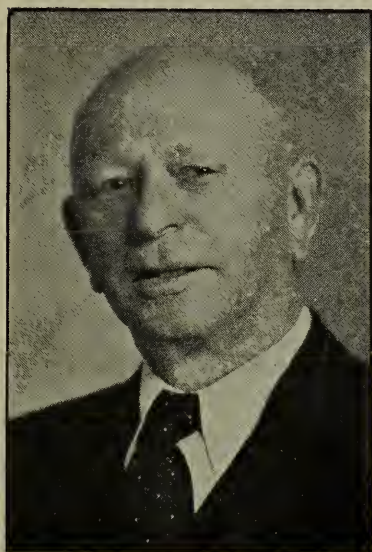
The Federal Surplus Commodities Corporation during October stabilized the market by offering to buy surplus apples, although because of the improved market demand it was necessary to dispose of only 87,656 bushels through that agency.

Growers reported early in November that they had moved all of their apples from the orchards. There are, of course, the usual numbers of Delicious and Grimes Golden in cold storage. Prices during and since Arkansas Apple Week have run from 60 cents to \$1 per bushel, with an average of at least 75 cents. The 1¾ million bushels brought \$1,312,000, and the increase in price of the surplus yielded an added \$90,000.

The amazing example of cooperation shows what is possible through well-organized agencies working with "the trade" and under aggressive leadership.

Do You Know . . .

George Banzhaf



For 30 consecutive years he has been doing extension work in Milam County, Tex., carrying out his county agent's creed of "dealing with soil and people."

the Government. He should build up and conserve his land for himself and for future generations."

Mr. Banzhaf's early extension work with the farmers was in the nature of introducing better planting seed and scientific cultural methods. "Take my early corn and cotton work, for example," reminisced Mr. Banzhaf. "Back in 1908 farmers thought seed was seed, so I established 75 demonstrations with as many men, each one planting 3 bushels of Government cottonseed and a little good Laguna corn seed. It was the success of these early demonstrations that made the work stick here."

His first outstanding success was in the boys' and men's corn-club work which started with the organization of a club with 100 members in 1910. Corn-club work was a success from the start, and the very first year the club had ninety 10-ear exhibits at the county fair.

In point of service George Banzhaf is the oldest county agent in Texas. He has lived in Milam County since the age of 8 when he came from his birthplace in Williamsport, Pa., to live with a married sister at Minerva, Tex. He received his education in local schools which were maintained only 3 months in the year, in the days when free school privileges were denied to students more than 14 years of age. Since the age of 16 he has been associated with agriculture, first as a farm hand on the farm of his brother-in-law, and later as a renter of 30 acres of land. At 19 he bought a farm near Minerva. Here he reared his family and lived until 1920 when he moved to Rockdale. A few years later the commissioners' court provided him with an office in Cameron,

his present home, where he is a good citizen—a leader in civic as well as extension activities.

During the last 30 years he has seen the development of higher standards of living and better farm homes and machinery made possible by the improved farming methods which he has consistently taught in working "with soil and the people."

Cost of 4-H Club Work Measured by Extension Time

During 1936, nearly 29 percent of the time of all State and county extension workers was devoted to 4-H club work, according to figures from 47 States and from Alaska, Hawaii, and Puerto Rico, as compiled by the Federal Extension Office. These figures are more indicative of the cost of 4-H club work than the funds specifically allotted to 4-H club work in the State budgets, as work with juniors is carried on not only by 4-H club agents but by county agricultural and home-demonstration agents as well as by extension specialists and supervisors.

The proportion of the time of all extension workers devoted to junior extension work in 1936 was only slightly less than in 1928 when, according to data obtained from 38 States, extension workers expended 31.97 percent of their time on work with rural boys and girls. The difference of 3 percent may be due to the participation of fewer States in the 1928 study and the slightly different procedure employed in assembling these earlier data.

Extension workers in the Southern States spent more time on 4-H club work in 1936 than was reported in any other region, the percentage figures for the South being 31.81; for the East, 31.08; for the Central States, 26.57; and for the West, 19.70.

The States devoting the most time to 4-H club work were: Indiana, with 45.74 percent of extension personnel time given to junior extension work; Oklahoma, 44.18 percent; Tennessee, 41.40 percent; and West Virginia, 40.58 percent.

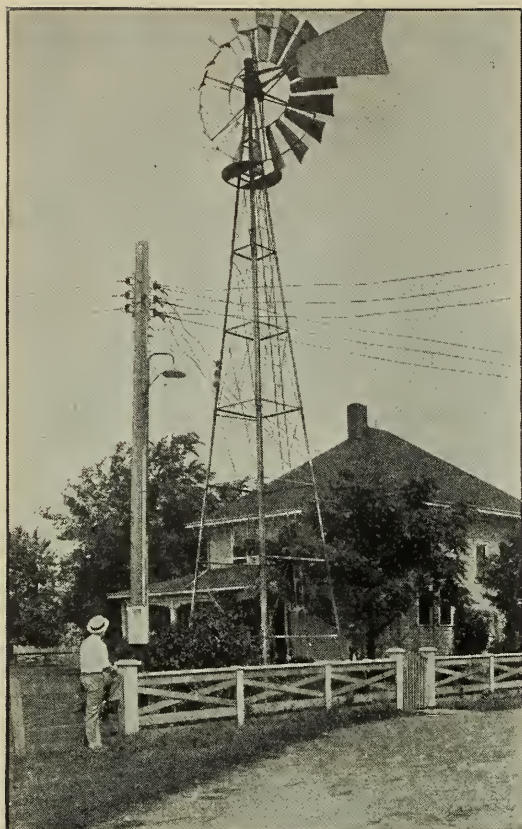
The lowest percentages of time devoted to 4-H club work were reported by extension workers in California and Nevada, with time averages of 13.33 percent each. Illinois reported 14.39 percent; Idaho, 14.46 percent; Missouri, 15.14 percent; and Montana, 15.25 percent.

Of the territories, Hawaii reported 39.09 percent of their extension workers' time spent on club work; Alaska, 33.33 percent; and Puerto Rico, 18.23 percent.

WITH a vision of present-day agricultural trends, George Banzhaf started his county agent work in Milam County just 30 years ago this month. He was one of the first county agents to advocate and teach land terracing. He has met with signal success in terracing and ranks as one of the leading terracing authorities of Texas.

"One of the greatest problems on the farms in Milam County is soil erosion," said Mr. Banzhaf. "The country is rolling, and the land has been washing away for the past 40 years. Back in 1914 I took up the newfangled scheme of terracing as an aid in building up the soil and have found it to be the most effective way of preventing soil erosion. During 1936 alone I spent 40 days running terrace lines on 45 different farms covering 1,358 acres in the county. Estimating conservatively, the terracing work done on these farms will increase the value of this land \$8 per acre, or a total of \$10,864.

"I believe that the present A. A. A. program of diverting a portion of our lands from soil-depleting crops to soil-building and soil-conserving crops is a wonderful help to agriculture," continued Mr. Banzhaf. "In this program the Government is paying the farmer to build up and conserve his soil. A good farmer should do this without benefit payments from



Planning for electricity assumes an important place in the extension program.

Two Types of Planning

TWO types of county planning conferences have been carried on successfully in Minnesota, the farm-business-planning conference to determine the advisable production for various types of farming areas and the extension conference to plan the extension program for the county.

Farm-business-planning meetings have been held in approximately half of the counties in Minnesota during the past 2 years under the supervision of farm-management specialists. Farmers have participated in discussions of desirable farm enterprises, the distribution of acreage, the importance of soil conservation, and the relation of farm and crop practices to farm costs and to farm incomes. Effective use has been made of the research records collected in types-of-farming areas by the division of agricultural economics. These data, representing farm incomes, cost of production, and relative efficiency of farm enterprises are used as a background for discussion with the farmer committees that work out advisable plans of farm production in the various types of farming areas. This work is increasingly important in connection with farm adjustments as developed by the agricultural conservation program.

Planning Angles

The extension program-planning conference has been held in practically every county in the State under the direction of supervisors for both farm and home extension work. As in the other conferences, county committees come together this time to discuss extension projects, the needs for assistance in the various lines of work, and a calendar or schedule of work that will permit a logical sequence in the development of the program. In these conferences also farmers are interested primarily in agricultural adjustment, the efficiency of production, the proper balance of cropping that will permit conservation of fertility, and the most economical use of labor and equipment. Essentially the discussions are of farm management but directed toward the adoption of a plan of work rather than a decision as to the type of advisable production which characterizes the farm business planning carried on by the farm management specialists.

Record Books Give Data

Considerable progress has been made in Tennessee in getting the entire extension program and the activities of other cooperating agencies more closely adapted to the various farming areas in the State as a result of the work in farm- and home-management records.

Last year there were approximately 3,604 farm-management records and approximately 210 home-management records. The Tennessee home- and farm-management departments are trying to acquire sufficient information and data representing the various types of farming areas in the State to adjust the entire program to these types of farming areas.

An effort is being made to increase the number of these records, not only to teach good farm- and home-management business practices to cooperating farmers

and farm women, but in order to get the data therefrom representing the various types of farming areas in the State on which to predicate not only the agricultural extension program but all other agricultural activities with which the Extension Service is cooperating.

Cutting the Pattern to Fit

Health outranks all other problems listed by the Illinois county program-building committees in making up a coordinated educational program in agriculture and home economics. To meet this need in the extension program, a health specialist has presented some work on health in 51 counties during the past year, and the problem of health has been discussed in the county program-building meetings in all counties.

Soil conservation, a second leading problem in the county programs, is being dealt with in a continuation of the new coordinated soil-improvement and erosion-control project in which are enrolled 67 counties and in which the efforts of the A. A. A., the Soil Conservation Service, and the Extension Service are being unified.

Rural electrification, the third outstanding issue in the county programs, is making marked progress. The importance of this problem to Illinois farmers is better understood when it is realized that, with the building of the lines already scheduled, the percentage of farms provided with electric current in the State has jumped from 13 to 22 percent in the last 2 years. This remarkable development has required a highly coordinated program of all agencies in the State interested in rural electrification.

Other activities listed in order of their importance in the minds of the county committees were 4-H club work, rural youth, home beautification, pasture improvement, community unit organization, home equipment, and organization of

There are as many ways of planning as there are planners. These five States approached their problems in their own way and found that way good.

home bureaus for the carrying out of extension work with homemakers.

County programs emphasizing these and a variety of other problems peculiar to the individual counties have been set up in more than two-thirds of the 102 Illinois counties.

Studying the Procedure

Intensive work on program determination was carried on in Vermont by first reviewing the extension program set up 5 years ago. The old program interpreted the aim of farm people as "a rich, satisfying rural life" and listed five steps which contributed to the ultimate goal. These were economic welfare, health, satisfying family relationships, constructive social-civic contacts, and recreation.

Last year's annual extension conference took health for its central theme. State specialists in agriculture, home demonstration work, and 4-H club work evaluated present extension activities in terms of the five steps to "a rich, satisfying rural life." Interest shown in the talks and panel discussions indicated that extension agents realized the part that each must

play in helping to solve the problems standing in the way of the attainment of each of these five steps leading to the goal. Extension programs may not be altered materially because of these discussions, but there is a greater unity and a deeper understanding of the philosophy of extension teaching.

The work was continued in August at an experimental conference of the State staff for the purpose of evolving a method of problem analysis and program determination. Neither time nor background material sufficed for an exhaustive study, but real progress was made, and follow-up committees are carrying the study forward.

The next annual extension conference to be held early in June will be used to continue the study of methods for program determination.

Permanent Background

In order to clarify problems in connection with county agricultural planning in Colorado, a compilation of background material has been developed in



each county during the past year or two on which to base a long-time program. This job has been the responsibility of the county agent, who has had the assistance of his district leader and his farm and home council.

County agricultural planning has been defined by the Colorado workers as the development of a long-time agricultural program which will assure the greatest safety to producers and a good standard of living for farm families.

Objectives of county planning in Colorado are virtually those set forth by the committee of 16 State agricultural planning leaders, who met in Washington last spring.

In gathering background data, the county agents have assembled facts and figures showing: Early history, soil conditions, moisture availability, data on crops, livestock, markets, income, investment and indebtedness (trends), expense, limiting factors, public facilities, and rural organizations.

Each of those main titles is subdivided to include details which are needed to get a clear picture of conditions within the area. For instance, under the title "soil" will be discussed: Types of soil, area of county, total number of acres in farms, total acres in public domain, average number of acres per farm, average number of acres in cultivation per farm, average number of acres in pasture per farm, and total number of acres under irrigation.



Farm- and home-record books are used as a basis for planning.

But that has been just the first stage of the development of county plans in Colorado. After all the background material was gathered by the agent and others, the county farm and home council went over it with the agent and discussed it from every possible angle, discussed the problems brought up, decided on solutions, outlined long-time programs with break-downs for annual programs, and then followed up with economic measuring meetings.

In some counties the whole program has been under way for 2 or more years. Many have held their economic measuring meetings to check the net results from year to year and to make changes found necessary to advance the long-time program—the stabilization of Colorado's agriculture.

Georgia Mountain Farmers Develop a New Crop

(Continued from page 18)

of the crop. The extension marketing specialists, L. E. Farmer and C. G. Garner, supervised the purchase of the seed and the grading and marketing of the crop. Mr. Rankin, extension plant pathologist, supervised the treating of the seed potatoes and the spraying during the growing season. He also did the inspection work.

The extension workers, as well as the other agencies that assisted, feel that their efforts were not by any means wasted, and that they have started a project that has possibilities of becoming a worth-while industry for the mountain farmers of north Georgia.

County Planning

More than 1,500 Arkansas farm men and women gathered around county council tables to draft plans under a program of county program planning. Conscious of the land-use problem, these 1,500 farm people reduced the acreage of row crops, particularly that of cotton, and increased the acreage of feed and food crops in ample proportion to their own needs. The 86 percent increase in winter legumes, 187,763 acres, is indicative of the care and management that farmers are now exercising with regard to soils. This acreage is 240 percent greater than that planted 2 years ago in the 72 counties reporting in 1937.

Radioing Extension in Arizona

IF YOU dial Station KTAR at Phoenix some noontime or early evening hour and hear "Home on the Range" played as the musical signature to an electrically transcribed program, you are listening to one of the 5-minute recordings prepared by the Arizona Extension Service in cooperation with the experiment station staff of the agricultural college of the University of Arizona. Five days a week the programs are sent out through five Arizona broadcasting stations which receive this radio service. In addition, a news service is broadcast over KTAR each Thursday as part of the Western Farm and Home Hour.

Members of the experiment station and the extension service staffs have cooperated in preparing these recorded talks. The first transcriptions were made by the State extension editor assisted by a technician from a local station who was also a student in the engineering college. This year a technician has been employed to make all the recordings.

The Arizona Extension Service bought its recording equipment in June 1936. Beginning in the fall of 1936 biweekly recorded broadcasts were given over Station KTAR as part of the Western Farm and Home Hour. Four additional stations were supplied with 8-minute transcriptions until June 1, 1937.

The speech department of the University of Arizona has been interested in the possibilities of using recording equipment as a means of voice improvement. As a result, the speech department has cooperated with the Extension Service by purchasing certain needed improved equipment.

Due to long distances it is necessary, from the standpoint of time and cost, for the University of Arizona to release the radio service to the various stations according to a definite schedule, and the listeners are given an opportunity to budget their time accordingly. Each record is used five times, as the areas serviced by the various stations does not overlap.

During the past year, county agricultural agents notified farm families, by letters, of the station, time, and purpose of the broadcasts. In these letters copies of a 14-week radio schedule were enclosed, to be kept as a handy radio guide. Home demonstration agents and specialists made announcements of the programs at their early fall meetings.

Local newspapers printed the weekly programs. In addition, the official organ of the Arizona Cattle Growers' Association printed an announcement of the radio schedules.

Introductory announcements which are given by the technician are included in the recording. Announcements of the following day's program are given by the speaker of the day at the conclusion of his talk. Theme-song records are provided by each station.

Last year 12-inch aluminum disks coated with cellulose-acetate compound were used for recording the 8-minute talks. This year 16-inch disks are used, with three talks recorded on one side and two on the other. In other words, a full week's program is recorded on each record. The transcription discs are unbreakable and practically noninflammable.

After having a special groove, modulated by sound picked up from the microphone, cut in the disc by the recording stylus, the freshly cut surface hardens in a few minutes upon exposure to the air. No special treatment is necessary before or after recording.

The recording equipment consists of three units—the microphone with its power supply, the speech amplifier with volume control and recording-level indicator, and the recording lathe with its small, but very important, cutting head. The equipment, the best available at the time, will handle wax, aluminum, or acetate-coated disks. The records may be made suitable for use on ordinary phonographs, or for transcription turntables which operate at the slower, more economical speed of 33½ revolutions per minute. The records may also be played back from the recording turntable through the same amplifier and heard over a loud-speaker, thus enabling the operator to make a complete check of the recording.

The equipment, annoyingly temperamental at first, necessitated the attention of a technician. The disks supplied with the machine became hardened in the warm, dry climate of Tucson. Even now the operator cannot be certain of success on every recording, but the number of failures is steadily decreasing. A temporary studio is maintained in the agricultural building and will be used until such time as permanent quarters can be assigned. It is hoped that a basement room may be arranged which will entirely eliminate extraneous sounds.



The "Fall of the Weed Empire" just as the farmer has gathered his friends about him and has the weeds in full retreat. The shields are 2 by 4 feet and made of plywood, covered with aluminum paint. The lettering is black enamel and the weed drawings in color. The cues and speaking parts for each player are pasted on the back of the shield.

Fighting Weeds With Drama

SOUTH DAKOTA has a serious weed problem. Noxious perennial weeds, leafy spurge, field bindweed, and a host of others crept up on unsuspecting farmers and were almost unnoticed until they had practically ruined many fine farms in the highly productive southeastern counties. The State planning board estimates that field bindweed or creeping Jennie alone causes an annual loss of 6 million dollars. Scattered patches of root-spreading perennial weeds have been found in nearly every county, giving threat of a 100 percent infestation of the State if not checked.

The Extension Service has pecked away at this situation for years. Educational meetings, voluntary weed-control committees, mass indignation meetings, county-owned power weed sprayers—all have been thrown in the face of the weed's advance in the last 10 years. Newspaper publicity, circular letters bulletins, folders, pamphlets, and weed-identification pictures in the newspapers, and on billboards flowed from the State office.

But still, Rex Bankert, assistant extension agronomist and chief pusher of the weed war, was not satisfied. He did not think that people were well enough acquainted with the danger of neglected patches of weeds, how they came, or the means of control, or that they were familiar enough with the weeds themselves to recognize and destroy them.

He hit upon the idea of a short two-act play, with the weeds as the principal

actors, to enact the story of the progress of weeds and how they can be made to retreat before the organized and aroused forces of man. Mr. Bankert called in John M. Ryan, the assistant editor, and Mrs. Leonora Gitchell, assistant rural sociologist, who runs the State one-act-play tournament each year.

Drawing upon his lore gained from Shakespearean and melodramatic study, Ryan wrote the script, called it "The Rise and Fall of the Weed Empire," and gave it a theme—"Every farm is a stage, and every weed must play its part." Costumes were the next problem confronting the play producers.

Mrs. Gitchell's fertile imagination suggested shields—large wooden ones to be carried before the actors, with the name of the character each represented painted on the shield face. It was only a step further, and Milo Potas, the staff artist, came with his brush and painted in color the pictures of the worst and least familiar weeds above the weed names. The publicity specialists thought it was a better idea to make the pests generally identifiable than preparing cuts and mats for newspaper use.

So the play was whipped into shape, and one afternoon the local high school Smith-Hughes agricultural class put it on at the South Dakota Crop Show held at the college during the annual farm and home week. The audience was interested, and many moved down into empty front seats when the second act started. Weeds are rather a dry subject, but this

new idea of presenting the problem was interesting. They gave generous applause when Farmer and his friends, Extension Service, Crop Rotation, Weed Poison, Rye, and Duckfoot Cultivator, ran the weeds right out of the picture just before the last curtain fell.

Mr. Bankert arranged to have most of the State's county agents in the audience. Before they left for home, several of the agents from the worst weed-infested counties came around and asked to borrow the shields and script. "I'd like to get schools, 4-H clubs, and other organizations to put it on in my county," they said. "It sure tells the story."

Extension Industry

In 1937, Oregon's small-seed industry, an extension project of more than 10 years' standing, brought approximately 5 million dollars to the farmers of the State. Recognized as a development of sound economic basis because of the natural adaptation of the State to the production of small seeds, and because from 30 to 50 million pounds of the type of seed which can be grown in Oregon were annually imported into the United States, the production of these small seeds in 1937 became an industry of substantial proportions.

Many of the seeds providing this income are introductions or developments sponsored by the Oregon Extension Service. These include Ladak and Grimm alfalfa, Austrian winter field peas, improved vetches, crimson clover, and numerous grasses, among them crested wheatgrass, bent, orchard, tall oat, and English rye, and Chewing's and tall fescues.

To sustain this industry, the Extension Service is now emphasizing the maintenance of quality, which involves the selection and certification of seed as well as the control of insect pests, diseases, and weeds.

Increased Income

Mississippi farmers produced larger food and feed crops in 1937 than in 1936. According to the October 1937 crop report of the Bureau of Agricultural Economics, increases in food and feed production include 11½ percent more corn, 10 percent more oats, 5½ percent more hay, 6 percent more sweetpotatoes, and 32 percent more Irish potatoes.

New and Revised Film Strips Ready

TWENTY-NINE new film strips as listed below have been completed by the Division of Cooperative Extension in cooperation with the Soil Conservation Service, the Forest Service, and Bureaus of Agricultural Economics, Animal Industry, Dairy Industry, Entomology and Plant Quarantine, Plant Industry, and Public Roads. They may be purchased at the prices indicated from Dewey & Dewey, Kenosha, Wis., after first obtaining authorization from the United States Department of Agriculture. Blanks for this purpose will be supplied upon request to the Division of Cooperative Extension.

Series 425. *Erosion Control on the Northern Great Plains.*—Illustrates the havoc caused by soil blowing and soil washing, and the practices recommended and employed by the Soil Conservation Service. 43 frames, 50 cents.

Series 426. *Erosion Control in the North Atlantic States.*—Illustrates the practices recommended and employed by the Soil Conservation Service for the control of erosion in the North Atlantic States. 36 frames, 50 cents.

Series 429. *Production of High-Quality Cream for Butter Making.*—Supplements Farmers' Bulletin No. 602, Production of Clean Milk; Farmers' Bulletin 967, Cooling Milk and Cream on the Farm; and Miscellaneous Publication No. 213, High-Quality Cream for Butter Making. It illustrates the essential requirements for producing high-quality cream for butter making and the importance to the producer of delivering only high-quality cream to the creamery or cream-buying station. 30 frames, 50 cents.

Series 431. *Insect Pests of Stored Tobacco.*—This series is intended for use in the tobacco-storage and tobacco-manufacturing districts of the United States. The principal districts are in Connecticut, New York, New Jersey, Virginia, North Carolina, Florida, and Missouri. 46 frames, 50 cents.

Series 438. *Contour Furrows.*—This series is designed to illustrate true contour furrows and compare them with terraces and ridges in construction costs, methods of construction, soil control, moisture distribution, and convenience in farming. 32 frames, 50 cents.

Series 439. *Strip Cropping.*—Illustrates the value of strip cropping and shows how the system may be applied effectively under a wide range of conditions. 35 frames, 50 cents.

Series 441. *Hog Cholera Control.*—Illustrates how to recognize and control hog cholera. 40 frames, 50 cents.

Series 442. *Farming Practices That Conserve Soil and Water.*—This series depicts many of the more widely used farming practices employed to control soil losses by erosion and to effect water conservation in the various watershed demonstration projects of the Soil Conservation Service. 48 frames, 50 cents.

Series 443. *The Cotton Flea Hopper and Its Control.*—Illustrates the life habits of the cotton flea hopper, the damage it causes, and methods of control. 41 frames, 50 cents.

Series 444. *National Park Road Building.*—Illustrates general procedure in building national park roads under diverse conditions and methods of utilizing various native materials in their construction with a view to emphasizing safety, beauty, and harmony with environment. 62 frames, 65 cents.

Series 445. *Soybeans in the Orient.*—This series shows photographs which were taken during the studies of the soybeans in oriental countries. It is designed to show the importance of the crop in the Orient, the methods of production, and the many ways in which the soybean is utilized. 57 frames, 65 cents.

Series 446. *Insects of Tobacco in Florida and South Georgia and Their Control.*—Supplements several farmers' bulletins and illustrates the life stages and habits of the more important tobacco insect pests and measures recommended for their control. This film strip applies especially to the Florida and southern Georgia tobacco-growing regions, where these insects are of much importance, but should be of interest also to tobacco growers in other sections of the country. 46 frames, 50 cents.

Series 447. *Farm Forestry in the South.*—Illustrates the more important practices of forest farming, such as protection, thinning and improvement cutting of timber, utilization at home or for sale, and reforestation by planting small trees. 64 frames, 65 cents.

Series 448. *The Mexican Bean Beetle and Its Control in the East.*—Supplements several farmers' bulletins and illustrates the life stages and habits of the Mexican bean beetle and measures recommended for its control. This strip applies especially to that part of the United States lying east of the Mississippi

River and north of central Mississippi Alabama, and Georgia, where this pest is of great importance. 64 frames, 50 cents.

Series 449. *Pea Weevil Life History and Control.*—Illustrates the life history, habits, and injury caused by the pea weevil and shows in brief some of the methods used for conducting pea-weevil research. 47 frames, 50 cents.

Series 451. *The Single-Frame Film Strip.*—23 frames, 50 cents.

Series 452. *The Double Frame-Film Strip.*—23 frames, 50 cents.

Series 453. *Open Winter Roads.*—Shows how snow-removal equipment has kept pace with changing conditions and modes of travel, and illustrates present methods of maintaining open highways in winter. 67 frames, 80 cents.

Series 455. *Control of Water Erosion in the Central Great Plains.*—Illustrates water-erosion control practices for the central Great Plains. 48 frames, 50 cents.

Series 456. *Wind Erosion—Its Control on the Southern Great Plains.*—Illustrates the soil-erosion problems and methods of conservation in the Panhandle area of the southern Great Plains. 45 frames, 50 cents.

Series 457. *The Bedbug and Its Control.*—Illustrates the life history and habits of the bedbug and methods of control. 40 frames, 50 cents.

Series 458. *Soil Erosion and Its Control in Arkansas, Louisiana, and Texas.*—Illustrates the effects of soil erosion and methods used to control it in the South Central States. 38 frames, 50 cents.

Series 460. *Harvesting Southern Farm Timber for Steady Profit.*—Deals with farm practices of cutting timber for diversified products and uses in such way as to keep the land continuously productive and profitable. Pulpwood is given prominent consideration as a product along with sawlogs, piling, poles, ties, posts, and fuelwood. 48 frames, 50 cents.

Series 461. *Production and Marketing of Quality Eggs.*—Recommended in producing and marketing high-quality eggs. It emphasizes the care that the producer must take and the conditions under which the eggs must be kept in order that the original quality of the egg can be preserved until it reaches the consumer. 47 frames, 50 cents.

Series 462. *Decay in Buildings and Its Prevention.*—Illustrates the damage in

buildings that may be caused by fungi. Since improper construction is the primary cause of decay, poor and good practices in construction are pointed out. 49 frames, 50 cents.

Series 463. *Soil Erosion and Its Control in the Upper Mississippi Valley*.—Illustrates the nature of the erosion problem and methods used to conserve soil and water in the Upper Mississippi Valley. 48 frames, 50 cents.

Series 467. *Soil Erosion in the United States*.—This series points out the nature, extent, and significance of soil erosion in the United States. 48 frames, 50 cents.

Series 468. *Controlling Water and Wind Erosion in the Pacific Northwest*.—Illustrates the problems of controlling wind and water erosion in the Pacific Northwest and methods of conservation used. 46 frames, 50 cents.

Series 470. *Agricultural Conservation for 1938—Why and how?*—This series is based on the subject matter of pamphlet G-77 entitled "Agricultural Conservation in 1938—Why?" 43 frames, 50 cents.

Revised Series

The following seven series have been revised:

Series 104. *Farm Water Supply*.—Illustrates methods of providing the farm water supply. 48 frames, 50 cents.

Series 203. *Handling Rough Rice in the South to Produce High Grades*.—Supplements the revised copy of Farmers' Bulletin No. 1420, Handling Rough Rice to Produce High Grades; attention is also directed to Circular No. 292, Artificial Drying of Rice on the Farm. 48 frames, 50 cents.

Series 219. *Keeping Livestock Out of the Woods in the North Central States*.—Illustrates some of the damage that is done by livestock in grazing the woods, and the most practical method of preventing such damage. 54 frames, 65 cents.

Series 257. *High-Grade Hay from Producer to Consumer*.—Supplements Farmers' Bulletins No. 1539, High-Grade Alfalfa; No. 1700, Marketing Hay by Modern Methods; and No. 1770, High-Grade Timothy and Clover Hay. 63 frames, 65 cents.

Series 270. *Farm Home Life Today*.—This Series is self-explanatory and gives a general conception of modern home life on the farm as it may be found throughout the country. 80 frames, 80 cents.

Series 274. *Easier Housework Through Good Posture and Efficient Equipment*.—Illustrates how the homemaker may, even at little expense, have equipment installed in her home which will insure

War on Weeds in Indiana



Spraying a patch of Canada thistle in Madison County.

A UNITED effort has been made in 17 Indiana counties to exterminate weeds, especially the Canada thistle. The farmers and the Extension Service have worked together to carry out this weed-control program. From one to three representative farmers in each township were selected to serve on committees which assisted the county agents in demonstrating effective methods of weed eradication. Oliver C. Lee, Indiana weed specialist, visited the various counties and helped to conduct the demonstrations.

First of all, a survey was made to determine the extent of the Canada thistle infestation. Approximately 19,000 farmers reported 13,000 acres infested. Demonstration areas were located in

each township, cooperators were obtained, and demonstrations and tours were held to combat the weeds. Meetings and circulars were used to further the work. Newspapers carried weekly articles on the Canada thistle and its control. Two printed letters were sent to 20,000 farmers and later 2 mimeographed follow-up letters were distributed.

Three methods of eradicating Canada thistle were recommended; namely, spraying with sodium chlorate, persistent cultivation, or the use of alfalfa as a smother crop. A survey made to determine the result of the campaign indicated that 2,416 farmers reported using sodium chlorate; 3,418 had cultivated; and 5,633 are using the alfalfa method of eradication.

good posture, and hence save her own and her family time and energy. 57 frames, 65 cents.

Series F. C. A. 2. *Loans by Federal Land Banks and Land Bank Commissioner*.—50 frames, 65 cents.

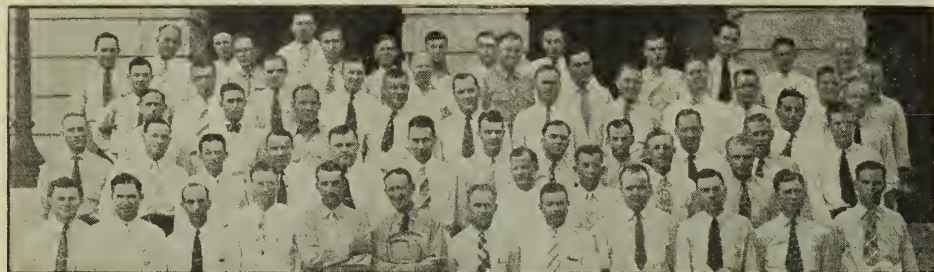
Apples for Relief

In 1937 the Vermont Extension Service cooperated with the Federal Surplus Commodities Corporation in establishing an apple-purchase program. Approximately 500 growers were contacted and more than 75,000 crates of federally inspected apples were distributed to relief families within and outside of Vermont.

"Red Dirt Cattlemen Association"

Approximately 20,000 acres of Louisiana grazing land have been fenced and used by the Natchitoches Parish Cattlemen Association, an organization starting in 1935 with 50 red-dirt cattlemen and organized by County Agent S. B. Thornton to cooperate with the United States Forest Service in the use of the national forest for grazing. This growing organization exercises control over the bulls on the grazing range and, in its efforts toward the promotion of a greater livestock industry, has emphasized the eradication of the tick.

Former 4-H Club Members Now Texas Extension Agents



EXTENSION has been in the field long enough to train its own workers. Many 4-H boys and girls have liked the work and have resolved to become agents

themselves. Some have already accomplished their goal. Among the more than 9,000 extension workers in the United States a growing proportion have had 4-H club training. No statistics for the country as a whole are available, but in a recent Texas Extension Conference, attended by 282 county agents and 192 home demonstration agents, all agents who had ever belonged to a club were asked to stand.

The pictures show those who stood, 61 men and 22 women who got their start in a 4-H club and now are responsible for extension work in a county.

All Working Together Build a County Recreation Center

THE playground of a county—a rural recreation center for 4-H boys and girls, older young people, and home demonstration club women, as well as their husbands—has been developed through the combined efforts of extension agents, the county council of 900 farm women, and county committeemen in Chesterfield County, S. C. Money raised by suppers, quilting parties, and other community enterprises, together with W. P. A. labor, helped to put over the project consisting of six buildings and an artificial lake, all built on the 16 acres of land which was donated by the town of McBee.

The need of an agricultural recreation center was so keenly felt by a small group of rural women while camping 2 years ago in a crowded camp which they were renting that their minds centered on a county-wide beautification project

in which community centers were being developed. In this group of thinking women there was one township chairman whose alert mind caught the sentiment of the rural women. She led a discussion group, getting from the members an expression of their needs and their willingness to help and suggestions as to how they could help to meet the needs.

Encouraged by the interest manifested by these farm women, Kerby Tyler, home demonstration agent, and Mrs. C. D. Sowell, council president, started the movement, and soon definite plans were made. A council committee visited lumber and shingle mills to obtain the best prices on building materials. Members of the State extension staff helped to work out building plans. The work started in December 1935 and proceeded slowly at first but gained momentum as the building progressed. The camp buildings

were completed in time for the spring meeting of the county council of farm women which was attended by 500 members.

The camp was named in honor of the home agent, Kerby Tyler. Five buildings, each 36 by 16 feet, which were built for the members of the farm women's council were named Tiller-Willis, in honor of the county farm agents; Neely-Plowden, in honor of the district agents; Lan-Ki-Mas, honoring the county delegation; Teal-Melver, for the W. P. A. supervisors; and Rockley Inn, in honor of the county commissioners. The largest building, 81 by 36 feet, consisting of the recreation-dining hall, kitchen, pantries, cellar, and sleeping quarters for the farm and home agents, was named in honor of Mrs. Dora Dee Walker, South Carolina's pioneer county home demonstration agent.

Following up the Electric Lines

When the click of the switch sends current shooting through miles of taut, new electric line resulting from rural-electrification projects in the State, Iowa farm men and women will be ready for their first experience with electricity.

They'll know what sets their washing machines gyrating, their toasters sizzling, and their motors humming.

Meeting in community groups in counties of the State where lines are being built, they are talking over with Ruby Simpson, extension home management specialist, and Harold Beaty, assistant extension agricultural engineer:

Which should come first—a refrigerator or a vacuum cleaner?

What to do if John is hauling hogs to town and the iron shorts?

A 3-pound or a 7-pound iron? One for \$1.19 or \$8?

How can such news stories as "Fire believed due to defective wiring" be avoided?

How can we "save" electricity?

Frosted bulbs or clear glass? One 100-watt bulb or two 50-watt bulbs?

Types of equipment are discussed and displayed and tips given in buying equipment. Homemakers learn how to figure cost of operating irons, sweepers, fans, toasters, and other equipment to determine which piece they can afford to use. Farmers study safe wiring of buildings and, with their wives, take tips from a lighting demonstration given in connection with the meetings.

Developing Leadership

Through Program Planning

PROGRAM planning in Johnson County, Mo., is the story of working out extension programs with the people in their communities as well as for the people. For the past 2 years County Agent Virgil Burk has called a series of program-planning meetings in each township with the local leaders in attendance. In most cases, the men on the community agricultural conservation committees were included in this local committee.

Last year 15 community meetings were held, and, despite bad roads, snow, and rain during the entire series, 99 of the 103 leaders notified were in attendance. Mr. Burk had notified the leaders of these meetings by letters in which he had outlined the purpose and reasons for the meetings. The meetings were called to order in filling stations, feed stores, banks, or schoolhouses. Generally, the meetings held at night were best attended.

Mr. Burk, in charge of each meeting, first took up the checking of material for the annual report on the mimeographed forms provided for this purpose. He explained the interest of the extension office in checking the year's accomplishments in this matter. The leaders were instructed to check the different items on the men in their communities which they knew about and pass the report form on to the next person, and so on around the table. Following this, Mr. Burk discussed the reasons and purpose of having a very definite program and the important part it played in developing future policies for the county. At these meet-

ings, volunteers were selected to carry on certain demonstrations in their communities.

"The program, as outlined in the different townships, makes a very complete extension program for the year," states Mr. Burk. "It has been interesting to me to study the reaction since these meetings, in that the local leaders are coming in to the extension office and wanting to know just what it is that they are to do on this project the coming year. In the past we have spent considerable time going to individual farms attempting to set up demonstrations with individual cooperators, which, in a measure, have not been successful because local leadership wasn't developed and the demonstrators did not feel as responsible to their own communities in seeing that the demonstrations were carried out. I am very optimistic and enthusiastic over this method of doing extension work and setting up a program of work for our county. It appears to me that we shall be accomplishing more in the least amount of time possible.

"The one big thing to date which has shown up is the leadership which has been developed. This has been brought out most clearly in that many of the educational meetings have been turned over to the committee to hold. This development in leadership has been worth all that it has cost to administer the entire program. Three years of experience with the program has developed a more efficient organization."

Home Efficiency for Iowa Girls

For 3 years this infant home-economics project, home efficiency, has quite captivated Iowa 4-H club girls and leaders.

Three years ago the State 4-H staff decided to do something about the "loose ends" that were left in the 4-H homemaking program. For example, the club girl learned, in the 2-year nutrition project, how to bake an evenly browned loaf of bread and how to can lusciously plump strawberries. She learned to

convert a few yards of gingham into a comely costume and to make her room a place where she likes to be by refinishing furniture and adding a braided rug or two.

There was no time set apart for coordinating these ideas into a plan for everyday living. Meal planning, managing time, living with people, saving energy, planning money use—these fundamental principles were "loose ends."

In giving specialized training in such home-economics subjects as nutrition, clothing, and home furnishings, it was felt that some of the fundamentals, intangible principles of broad home-economics edu-

cation for future homemakers, were being neglected. Mrs. Edith P. Barker, acting State leader, described the situation as "not seeing the forest for the trees."

To round out the 4-H homemaking program, a 2-year project designated as home efficiency was outlined and a 4-H home-efficiency specialist, Dorothy Simmons, added to the staff. A big objective of the project is to dignify the common tasks—not what we do, but how, makes the difference between disagreeable and pleasant living. To meet this goal, consideration was given in the 2-year project to efficiency in kitchen cleaning, laundry, equipment, and storage, all including an analysis of time- and energy-saving methods.

Running through all the work are two emphases: The first, money management, and the second, human relationships. Home-efficiency girls keep accounts of their personal expenditures through the 2 years and use them in making their next year's budgets more satisfactory. Personality development is encouraged through a study of hobbies, planning for leisure, character traits, hostess-guest relationships, making a design for living, family membership, being a friend, and living in the community. The home-efficiency project also provides a vehicle for a study of sanitation and rural electrification.

"The 4-H home efficiency project," testifies an Iowa leader, "has not only brought us new and vital subject matter but also vision. It shows the club girls the home and the community as a place where they work and play and live."

Program Planning in Georgia

Last year, approximately 8,000 Georgia farm people gathered in 400 meetings under the leadership of county agents to discuss their problems. A county-program planning committee was established in practically every county to summarize the discussions by the larger groups and make definite adjustment recommendations.

HARWOOD HULL, JR., formerly extension editor in Puerto Rico, has joined the editorial staff of the Alabama Extension Service. Mr. Hull will assist the editor, Mr. Brackeen, in developing extension use of radio in the State. Hector F. Bird takes Mr. Hull's place as extension editor in Puerto Rico.

Demonstrates Efficient Kitchen

HOME MANAGEMENT leaders in Walla Walla County, Wash., have helped their home demonstration agent and the home management specialist to make the demonstration of "The Efficient Farm Kitchen" a success. The efficient farm kitchen was planned with the help of those leaders and was set up as a demonstration at the Walla Walla County Fair.

Prior to the demonstration at the fair, the home management leaders were trained at three meetings. At the first meeting the idea of the demonstration kitchen was proposed. To make the leaders familiar with all that is back of planning a kitchen, a list was made of all the functions performed in a farm kitchen. It was decided where each function would be carried out, and then all equipment used to perform the function was located at the same place.

In this way it was decided that the efficient farm kitchen should have a place near the sink for a small bucket of potatoes and that there should be a knife rack at both the sink and mixing tables; that a combination stove would be best for a farm home in southeastern Washington; and that the top of the woodbox, which should sit at the left of the stove, might serve as a place to dish up food.

When the floor plans of such a kitchen were presented to the leaders, it looked so different from the usual kitchen that they were not sure they liked it. With a month to think it over and to try out certain new ideas, the leaders met again with the agent and specialist. They had many suggestions to offer which seemed extremely practical and were put into the efficient kitchen plans. When the final floor plans were agreed upon, floor coverings, table tops, wall colors, and curtains were discussed. Plans were made for the leaders to help demonstrate the kitchen to the public during fair week.

Two days before the fair opened, the general committee met with the specialist and agent to complete detailed plans as to where groceries and equipment were to go, what the duties of each hostess would be, and how they would take care of the crowd. As the leaders who had helped with the development of the plans walked into the kitchen, their most common

exclamation was, "It is much easier to understand it this way than on paper."

The day before the fair opened, the chairman for each unit met with her helpers to stock and arrange their unit with the equipment and groceries which had been lent by the merchants. Each item was put in its proper place. The leaders enjoyed this so much that they frankly said it was the most fun they had had since they started housekeeping. To avoid confusion, each unit chairman and her helpers met at a different hour during the day. These helpers were scheduled to be on hand for a certain period of time to explain the kitchen to the public.

Two of the leaders who were a great help, both in the planning and in developing and demonstrating, had made definite plans to build the efficient kitchen in their own homes this fall. The leaders who helped got more out of this piece of work than anyone else. They will serve as good result demonstrators in their communities for years to come. They found many things which they could put into their own kitchens, even though some of them were previously well equipped. They are trained in the fundamentals of kitchen planning and will be helpful to their neighbors in creating the desire for better kitchens, as well as in showing them how to make efficient arrangements.

Florida Stages Exhibit of Meat Cured in Cold Storage

Cold-storage curing of meat for farmers has grown in recent years to be an important industry in the Southeast. In Florida alone more than 6 million pounds of farm-dressed meat were cured during the 1936-37 season in this manner, and it is expected that an even larger poundage will be "cold-cured" this season. The State Extension Service has encouraged and assisted the industry, giving cutting and curing demonstrations in principal meat-curing counties.

Low temperatures are necessary to the satisfactory curing of the meat, and in the extreme South cold weather is often uncertain. Ice factories began developing a cold-storage business, and it was

found that meats could be cured without loss through the use of cold-storage facilities, which are very seldom available on the farm. Either the brine or dry salt cure can be used in cold storage.

At a meeting of cold-storage meat curers in Florida at the College of Agriculture at Gainesville, during November 1937, this group staged one of the first exhibits of cold-storage-cured meat in the United States, according to K. F. Warner, meats specialist with the Extension Service of the United States Department of Agriculture. This consisted of hams, shoulders, sides, and other cuts which had been cured for farmers 10 months previously and which looked as though they had just come from the curing plant.

At their meeting the curers heard discussions of methods of refrigeration, costs of power, differences due to arrangement of refrigeration, and accounting and records from the time the meat is received until it is delivered and paid for. A demonstration in meat cutting proved of popular interest. At their supper the visitors enjoyed some hams cured by one of their members and then purchased from the farmer.

That the visitors appreciated the interest shown and the help rendered by the Extension Service was evident. A. J. Reinhart, of the Ridgewood Farm Meat Curing Plant at Dade City, volunteered the following comment: "Four years ago I sat right here in a similar meeting, and it saved me thousands of dollars in getting my plant established and in successfully curing meats."

Hall of Fame

Greene County, Ark., home demonstration clubs have a hall of fame made up of the women who have been active club members for 8 years or longer, reports Mrs. Geraldine Orrell, home demonstration agent. This hall of fame was established last fall when recognition was given the veteran members at the fall county council meeting of home-demonstration clubs. At that time the 19 women who were eligible appeared as a group, and each made a brief talk on what home-demonstration club work had meant to her.

Again this year about 35 women were eligible, and recognition was given to those who had not missed more than three meetings in any year for the past 8 years. At the county council meeting held in October, each was given an opportunity to comment on her experiences in home-demonstration club work.

Extension Degree

A plan just approved in the graduate school of the University of Missouri grants a master of arts degree in extension methods. The requirements are 10 hours out of the 32 in rural sociology, agricultural economics, and extension methods with a thesis on an extension problem.

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Shopping Tours

Nearly 400 homemakers from nine New Hampshire counties are studying merchandise first-hand and are learning how to buy women's coats, children's clothing, foundation garments, men's shirts, and pajamas. Hazel E. Hill, clothing specialist, has arranged seven shopping tours to the leading stores so that the rural women can become acquainted with the salespeople as well as the wares carried by the establishment. Each of the merchants visited give short talks on buying, in addition to the demonstrations and discussions held by the sales force.

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Grasshoppers

One of the major service programs of 1937 in Colorado was the grasshopper-control campaign with county agricultural agents acting as leaders. More than 20,000 farm cooperators obtained over 30,000,000 pounds of poison grasshopper bait and thereby protected approximately \$9,000,000 worth of crops.

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One-Variety Cotton

During 1937, the Extension Service cooperated with other agencies in organizing 33 one-variety cotton communities in Mississippi to raise the total to 159 one-variety communities in 48 counties.

Director E. H. White says, "Mississippi farmers have made marked progress in improving the quality of cotton grown in the State during the last few years through the organization of one-variety cotton communities, through the work of the Mississippi Cooperative Cotton Association which has offered a cotton-classing service to farmers and paid members on the basis of grade and staple, and through the work of the 4-H cotton club

boys. Only about 4 percent of the State's cotton production is now less than $\frac{7}{8}$ inch in staple length and less than 25 percent in less than 1 inch in length."

With 152 one-variety cotton communities in 78 counties, Georgia made great strides in the one-variety cotton movement in 1937. The 16,000 farmers in these communities who planted 270,000 acres of one-variety cotton, produced approximately 135,000 bales of cotton—a substantial increase over the previous year.

In addition, such good cotton is planted outside of these communities as a direct result of the accomplishments of the one-variety farmers. Georgia had about 5,000 acres of Sea Island cotton in the southern part of the State, as compared with only 250 acres the preceding year. There were seven Sea Island gins as compared with two in 1936.

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Variety

The training and skill of homemakers were featured at the New York State Fair at Syracuse by home bureaus from eight counties. The 41 county home bureaus, consisting of groups of women organized for training in homemaking, have a total membership of more than 25,000 persons.

Herkimer County Home Bureau showed the home care of knitted garments; Delaware, gardens for health; Chautauqua, home care of the hair and skin; Erie, how a back room becomes a laundry; Rensselaer, furniture groups; Warren, the study of human relationships; Jefferson, planning the home kitchen; and Franklin, homemakers against disease, emphasizing how to help fight pneumonia.

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A World Problem

"In looking backward over the year, I am convinced that our most significant contribution of the Extension Service to farm people in Alabama was that of stimulating and developing interest, understanding, and appreciation among farm people of the fact that the agricultural problem is not local or State, but national and even international. In this way the farmer's horizon has been extended, his knowledge broadened, and his understanding made more complete," states Director P. O. Davis of Alabama.

Grasshopper Control

An estimated saving of \$262,550 was effected for Arizona farmers and ranchers through the grasshopper-control campaign conducted by the Agricultural Extension Service in cooperation with the Bureau of Entomology and Plant Quarantine and the Arizona Commission of Agriculture and Horticulture. Work was carried on in seven counties on 22,406 acres. Poison to treat this acreage required 67 tons of bran and 2,810 gallons of sodium arsenite. Local agencies transported the poison bait which was furnished by the Federal Government.

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4-H Club Hall

The building of a 4-H club exhibit and demonstration hall at the fair grounds in Pueblo rounds out Colorado's 4-H club activities for 1937, during which for the first time a State 4-H club organization was perfected and State 4-H club officers were elected.

The stone building will be 150 feet long and 50 feet wide. It will have hardwood floors, a stage at one end, and movable partitions in the form of exhibit boards, on which will be displayed the handiwork of various 4-H club members during the State fair. It is also planned to use the structure as a recreation hall during most of the year, as it can be converted into an auditorium.

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Dairy Improvement

During the past year, 35 demonstrations in making cheese, butter, and ice cream were given by the Pennsylvania Extension Service before 1,189 interested persons. Quality milk meetings were conducted for the discussion and solution of sanitation problems. Plant operators were guided in installing the proper type of equipment and farmers received assistance in building milk houses.

More than 30,000 cows were tested by dairy herd-improvement associations. The average milk production was 8,302 pounds and the average butterfat production, 334 pounds per cow. There were 1,173 herds averaging more than 300 pounds of butterfat per cow. Fifty-five bull associations having 388 members operated in 28 counties. These associations owned 205 bulls which were rotated from block to block within the associations.



The Farmer Goes Shopping for CREDIT

A majority of farmers use credit in one form or another because they find it necessary to the most efficient operation of their business. They have found that some credit is efficient and inexpensive, while other credit is lazy and costly because it is not fitted for the work it is asked to do. Therefore, farmers don't buy the first credit dollar that is offered to them—they go shopping for the kind that fits their needs.

Farmers want to get their credit from a sound, dependable source. They want to be able to get loans when they need them, and repay them just as soon as they are able. They want the interest to stop on every amount of principal as soon as it is repaid. They like to have a voice in the management of the organization from which they get their loans.

As an extension worker you are an adviser to farmers on many subjects, among which is credit. Therefore, you want to be well versed in agricultural finance.

*For a list of publications which deal
with agricultural credit, available to you without
charge, write to the*

Farm Credit Administration
Washington, D. C.



Here's HELP for YOU

Information on:

Long-Term Farm Mortgage Loans
Short-Term Production Loans
Credit For Farmer Cooperatives
Farm Family Credit

These circulars will help to keep you informed on cooperative credit as provided through the farmers' own credit system. You will know what loans are available and how they may be secured.